DOCUMENT RESUME

ED 237 917 CG 017 174

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TITLE Effort versus Ability: Preferences and Affective Reactions in Achievement Settings.
PUB DATE Aug 83
NOTE 17p.; Paper presented at the Annual Convention of the American Psychological Association (91st, Anaheim, CA, August 26-30, 1983). Best copy available.
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Ability; *Achievement; College Students; *Emotional Response; Failure; Higher Education; Persistence; Predictor Variables; Psychological Patterns; *Self Concept; Success
IDENTIFIERS *Effort

ABSTRACT

Psychological researchers continue to debate the relative contribution of ability and effort to feelings of self-worth. To investigate student preferences for ability or effort and their relationship to self-worth, and to assess the relative contribution of ability and effort to affective experience, two separate studies were undertaken. In the first study, 148 college students were asked if they preferred to succeed or fail with high ability-low effort, or with low ability-high effort, in both school and work. In the second study, 64 college students rated the relative contribution of ability and effort to their midterm examination performance and subsequently rated the extent to which they felt pride (given success) and shame (given failure). An analysis of the results showed that both ability and effort contributed to feelings of self-worth, with high ability preferred over high effort when ability was still of instrumental value. Effort was linked with pride, guilt, and happiness, while failure ascribed to low ability was associated with feelings of shame. Future research should examine a general model which includes ability and effort, task importance, perceived task difficulty, and expectancy as determinants of self-worth and emotion. (BL)

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Effort versus Ability: Preferences and Affective Reactions in Achievement Settings

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This paper was presented at the American Psychological Association Convention, Anaheim, California, August, 1983

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Abstract

Two experiments examined the psychological consequences of ability and effort attributions in achievement settings. In Experiment 1, subjects were asked whether they would prefer to be a student who was succeeding (failing) in college with high ability-low effort or high effort-low ability. The high ability-low effort alternative was preferred. However, in a second experimental condition where high ability was no longer instrumental to goal attainment, subjects more preferred to be an individual who had succeeded (failed) in his or her life's work given the high effort-low ability alternative. It was concluded that both ability and effort contribute to feelings of self-worth, with high ability preferred over high effort when ability is still of instrumental value. Experiment 2 examined the relation between ability, effort, and affective reactions to success and failure. After receiving their midterm exam grade, students rated the relative contribution of ability and effort to exam performance, and the extent to which they felt pride and happiness (given success) and shame, guilt, and unhappiness (given failure). Regression analyses showed effort to be linked with pride, guilt, and happiness, while ability emerged as an important predictor of shame. Finally, a general model which includes ability and effort, task importance, perceived task difficulty, and expectancy as determinants of self-worth and emotion was presented.

Effort versus Ability: Preferences and Affective Reactions in Achievement Settings

The relative contribution of ability and effort to feelings of self-worth has been the subject of some debate in contemporary psychology. On one hand, some investigators have held that ability is the key determinant of self-regard and that affective reactions to success and failure are mediated by attributions to ability (Covington & Omelich, 1979a, 1979b). Others have noted, however, that fulfilling one's potential through hard work is also an important source of self-worth, and that many achievement-related emotions are maximized by self-ascription to effort (Weiner & Kukla, 1970; Weiner, Russell, & Lerman, 1978, 1979). The present paper considers a number of issues relevant to this problem.

Preferences for High Ability or High Effort

The self-worth theory of achievement motivation (Beery, 1975; Covington & Beery, 1976) proposes that individuals strive to maintain a self-perception of high ability, and that feelings of self-worth derive primarily from the belief that one is able. Such concern with competency is presumed to stem from "... society's tendency to equate personal worth with the ability to achieve competitively" (Covington & Omelich, 1979b, p. 688). Covington and Omelich reason that since failure despite high effort may implicate low ability as a causal factor, expending effort poses a potential threat to an individual's need to preserve a sense of competency. Thus, it is hypothesized that in achievement-related settings where one must risk potential failure, students often prefer not

to be hard working. Presumably, the adoption of such a self-handicapping strategy (cf. Berglas & Jones, 1978) allows a student to maintain the perception that he or she is able, even when performance is poor. In apparent support of this position, Nicholls (1976) found that when university students were asked "Who would you rather be, a student who does well (poorly) with much ability and little effort or one who does well (poorly) with little ability and much effort?", subjects expressed a clear preference to be the highly able student. This preference for high ability has been interpreted as evidence that ability is more central to self-definition and makes a greater contribution to self-worth than effort (Covington & Omelich, 1979a).

However, there are alternative explanations for the finding that when forced to choose, college students prefer to be highly able rather than hard working. As Nicholls (1976) notes, high ability may be preferred because it generates a greater expectancy of future success than high effort. This is so because ability is a stable attribute, whereas effort is largely unstable (see Weiner, 1979). Thus in an achievement context, expectancy, rather than self-worth, may underlie the preference for high ability. When no longer instrumental to goal attainment, the desire to be more able than hard working may be attenuated.

An investigation was conducted testing the self-worth versus expectancy explanantion for the reported preference of students to be high in ability but low in effort. In this study, 148 UCLA undergraduates were asked to indicate the extent to which they would prefer to be a student

who is succeeding (failing) in college with high ability-low effort, or one high in effort but low in ability. In addition, in a second experimental condition, subjects were asked whether they would prefer to be an individual who had succeeded (failed) in his or her life's work given these same attribution alternatives. It was reasoned that if preference judgments are based upon self-worth, and if the perception that one is able is the main determinant of self-regard, then individuals should choose the high ability-low effort alternative in both experimental conditions. If, however, preference reflects a concern with future goal attainment, then the desire for high ability-low effort should be evident only in the student conditionn where high ability is of instrumental value.

The results supported the hypothesis that attributional preference is in part determined by the greater expectancy of future success associated with high ability. As Figure 1 shows, for both success and failure, choice is influenced by whether the possession of high ability is instrumental to goal attainment, $F(1, 147) = 31.82$, $p < .001$. More specifically, subjects

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Insert Figure 1 about here

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preferred to be students of high ability-low effort; for success, $t(147) = 4.68$, $p < .001$; for failure, $t(147) = 4.57$, $p < .001$. But no such preference was expressed when ability no longer had instrumental value (see Figure 1). In this latter condition, although the two alternatives were preferred about equally given an unsuccessful outcome, $t(147) = 1.76$ (ns),

subjects more preferred to be the individual who had succeeded in life through hard work despite low ability, $t(147) = 2.52$, $p < .05$. Thus, the data provide no support to sustain the notion that self-worth is uniquely associated with ability. Rather, self-worth appears to be augmented by the perception that one is able and hard working. When high ability is preferred over high effort, it is the greater expectancy of future success associated with high ability that is the mediating factor.

Affective Reactions

Having examined the role of effort and ability in preference judgments, the next issue to be considered concerns the relative contribution of the two causes to affective experience in achievement settings. A number of investigators have expressed opinions on the matter. For example, Sohn (1977) speculated that pride and shame may be associated with effort attributions, while other affects such as happiness and unhappiness may be more closely allied with ability attributions. Covington and Omelich (1979a, 1979b) found that positive affect in success is jointly determined by ability and effort, whereas failure reactions are mediated by attributions to low ability. And Weiner et al. (1978, 1979) found that other affects common to achievement settings, such as guilt, are linked with effort attributions.

In an attempt to clarify the issue, the relation between ability, effort, and affect was assessed in a classroom settings. Subjects in the study were 64 UCLA undergraduates enrolled in an upper division psychology course. On the day midterm exam grades were posted, subjects indicated on simple rating scales the extent to which their exam performance

was due to ability and effort. In addition, two different classes of affect identified by Weiner et al. (1978, 1979) -- esteem-related, self-relective emotions (pride, shame, and guilt) and global, outcome-dependent emotions (happiness and unhappiness) -- were rated. Subjects who considered their exam performance to be a personal success(N = 35) rated the amount of pride and happiness they felt, while subjects who considered their performance to be a personal failure (N = 29) rated the amount of shame, guilt, and unhappiness they experienced.

To assess the relative contribution of ability and effort to emotional experience, regression analyses were performed. Considering the three esteem-related affects, Table 1 shows that ability made a significant contribution to feelings of shame, but not pride or guilt.

Insert Table 1 about here

Conversely, effort emerged as a key determinant of pride and guilt, but not shame. Table 1 also shows that inferred effort had a considerable impact on how happy one felt following a successful outcome, while neither ability nor effort accounted for feelings of unhappiness in failure.

In sum, the data show both causes to be important determinants of affective experience in educational settings. While emotional reactions to success appear to be more singularly dependent on self-ascription of high effort, in failure, shame is linked with low ability and guilt is associated with low effort. This supports the claim that guilt arises from the perception that one has transgressed a moral value, whereas

shame results from a perception that one is inadequate or inferior (Wicker, Payne, & Morgan, 1983). As concerns the a priori-classified outcome-dependent emotions, in accordance with prior research (Weiner et al., 1978, 1979) unhappiness was found to be unrelated to ability and effort. However, the present study has found happiness to be significantly linked to high effort. Although apparently inconsistent with previous findings, it may be that the relation between effort and happiness in the present study was mediated through a third variable (such as task importance).

Summary

The research reported in this paper can be summarized as follows: Both ability and effort contribute to feelings of self-worth. High ability was preferred more than high effort in an achievement setting because of its enduring quality which generates a greater expectancy of future success. When the possession of high ability did not have instrumental value, individuals did not prefer high ability over high effort. In addition, it was shown that ability and effort attributions have unique emotional consequences. Pride, guilt, and happiness were linked with effort ascriptions, while failure ascribed to low ability was associated with feelings of shame. Unhappiness was not related to either cause.

General Discussion

A final note concerning the relation between ability and effort

seems warranted. As previously indicated, self-worth theory proposes that students use effort expenditure to infer ability level. Thus, the harder one tries, the less able one perceives oneself to be. However, there are problems with the presumed effort→ability sequence. First of all, the relation between ability and effort in Experiment 2 was only minimally negative given failure, $r = -.15$ (ns). And given success, the two causes were positively related, $r = +.35$, $p < .05$. Thus, the pattern of results expected from self-worth theory was not observed. Furthermore, while possible in some novel situations, it is questionable whether college students typically infer how smart they are from an assessment of how hard they have tried. Rather, it seems more likely that how hard one tries is determined in part by how able one perceives oneself to be.

A general causal model which includes a path from ability to effort in addition to other variables is illustrated in Figure 2. The starting point in the causal sequence is presumed to be a joint determination of

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Insert Figure 2 about here

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task importance and ability level. Both the intrinsic and extrinsic value associated with success are included under task importance, and ability is taken to include elements of acquired skill and innate ability (aptitude). The relation between the two variables is left unspecified. In

some instances, those tasks at which an individual is competent acquire importance; other times, the importance of doing well in the past has led an individual to become proficient and highly skilled. The next step in the model is a subjective evaluation of task difficulty. Following Heider (1958), it is assumed that one's perception of task difficulty is in part determined by one's ability level. All other things being equal, tasks for which one possesses high ability are subjectively less diffiuclt than tasks for which one possesses low ability. Task importance and perceived task difficulty, then, combine to determine how hard one tries. The more highly valued is success and the more difficult the task, the harder one works to achieve success. Ability has no direct effect on effort in the proposed model. Rather, its influence is indirect, presumed to be mediated through task difficulty. In the next phase, the figure shows task difficulty and effort to determine expectancy of success. Specifically, the subjective likelihood of attaining a goal is hypothesized to depend upon perceptions of how difficult the task is, and how hard one intends to try. These factors, in turn, depend upon the individual's ability. Finally, feelings of self-worth and affective reactions are conceived as a response to the entire constellation of antecedent factors.

At the present time, the proposed model is speculative and the demonstration of its utility must await future empirical confirmation. Thus, its present value is primarily heuristic, providing a means of organizing and directing future research.

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Table 1

Standardized Regression Coefficients and R^2 Values for Esteem-Related and Outcome-Dependent Affective Reactions

	Esteem-Related			Outcome-Dependent	
	Pride	Shame	Guilt	Happiness	Unhappiness
Ability	.079	.482*	.171	-.042	.254
Effort	.595***	.079	.515*	.503**	-.032
R^2	.394***	.227*	.268*	.240*	.068

* $p < .05$

** $p < .01$

*** $p < .001$

Figure 1.

Mean Attributional Preference for
Success and Failure in College and Life's Work

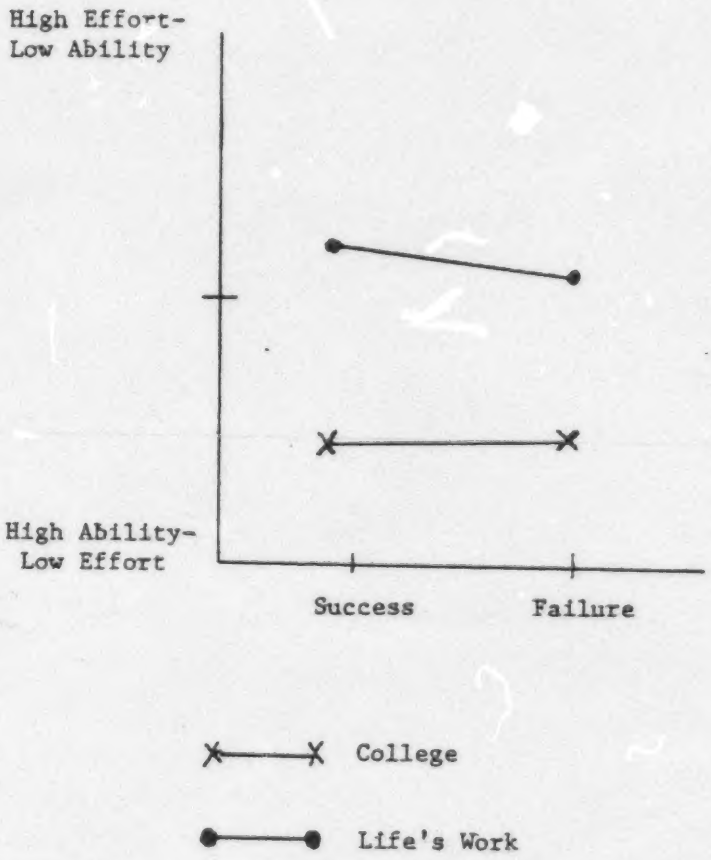

Figure 2

Hypothesized Causal Sequence